

AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Previously Presented) A method of trimming a parametric surface, comprising:
prior to rendering the parametric surface:

producing a trimming texture, the trimming texture comprising a texture map image representation of a trimming curve for the parametric surface, the trimming curve defining trimmed and untrimmed portions, the untrimmed portion comprising opaque pixels and the trimmed portion comprising transparent pixels;
and

during rendering of the parametric surface:

obtaining a list of polygons that define the parametric surface; and
drawing the polygons to generate the parametric surface, wherein drawing comprises applying the trimming texture to the polygons, the trimming texture being applied by texture mapping the trimming texture onto the polygons to produce the trimmed and untrimmed portions.

2 to 7. (Cancelled)

8. (Previously Presented) The method of claim 1, wherein the trimming texture is produced from a plurality of trimming curves for the parametric surface.

9. (Cancelled)

10. (Previously Presented) The method of claim 1, further comprising:
obtaining a material texture for the parametric surface; and
applying the material texture to the untrimmed portion.

11. (Previously Presented) An article comprising a machine-readable medium that stores instructions for use in trimming a parametric surface, the instructions for causing a processing device to:

prior to rendering the parametric surface:

produce a trimming texture, the trimming texture comprising a texture map image representation of a trimming curve for the parametric surface, the trimming curve defining trimmed and untrimmed portions, the untrimmed portion comprising opaque pixels and the trimmed portion comprising transparent pixels; and

during rendering of the parametric surface:

obtain a list of polygons that define the parametric surface; and
draw the polygons to generate the parametric surface, wherein drawing comprises applying the trimming texture to the polygons, the trimming texture being

applied by texture mapping the trimming texture onto the polygons to produce the trimmed and untrimmed portions.

12 to 16. (Cancelled)

17. (Previously Presented) The article of claim 11, wherein the trimming texture is produced from a plurality of trimming curves for the parametric surface.

18. (Cancelled)

19. (Original) The article of claim 11, further comprising instructions for causing the processing device to:

obtain a material texture for the parametric surface; and
apply the material texture to the untrimmed portion.

20. (Previously Presented) An apparatus for use in trimming a parametric surface, comprising:

memory which stores executable instructions; and
a processor that executes the instructions to:
prior to rendering the parametric surface:

produce a trimming texture, the trimming texture comprising a texture map image representation of a trimming curve for the parametric surface, the trimming curve defining trimmed and untrimmed portions, the untrimmed portion comprising opaque pixels and the trimmed portion comprising transparent pixels; and during rendering of the parametric surface:

obtain a list of polygons that define the parametric surface; and draw the polygons to generate the parametric surface, wherein drawing comprises applying the trimming texture based on a trimming curve to the polygons, the trimming texture being applied by texture mapping the trimming texture onto the polygons to produce the trimmed and untrimmed portions.

21 to 25. (Cancelled)

26. (Previously Presented) The apparatus of claim 20, wherein the trimming texture is produced from a plurality of trimming curves for the parametric surface.

27 to 30. (Cancelled)

31. (Previously Presented) The apparatus of claim 20, wherein the processor executes instructions to:

obtain a material texture for the parametric surface; and
apply the material texture to the untrimmed portion.

32. (Previously Presented) The method of claim 1, wherein the trimming curve is produced from one or more vector-valued functions.

33. (Previously Presented) The method of claim 1, wherein the parametric surface is part of a three-dimensional model.

34. (Previously Presented) The method of claim 1, wherein the method is performed by an alpha channel of texture blending/mapping hardware in a three-dimensional (3D) graphics processor.

35. (Previously Presented) The method of claim 1, wherein the parametric surface comprises control points that dictate a shape of the parametric surface, the trimming texture being applied to the shape of the parametric surface dictated by the control points.

36. (Previously Presented) The method of claim 1, wherein the polygons have texture coordinates that are used in defining a texture of the polygons.

37. (Previously Presented) The article of claim 11, wherein the trimming curve is produced from one or more vector-valued functions.

38. (Previously Presented) The article of claim 11, wherein the parametric surface is part of a three-dimensional model.

39. (Previously Presented) The article of claim 11, wherein the instructions are executable by an alpha channel of texture blending/mapping hardware in a three-dimensional (3D) graphics processor.

40. (Previously Presented) The article of claim 11, wherein the parametric surface comprises control points that dictate a shape of the parametric surface, the trimming texture being applied to the shape of the parametric surface dictated by the control points.

41. (Previously Presented) The article of claim 20, wherein the polygons have texture coordinates that are used in defining a texture of the polygons.

42. (Previously Presented) The apparatus of claim 20, wherein the trimming curve is produced from one or more vector-valued functions.

43. (Previously Presented) The apparatus of claim 20, wherein the parametric surface is part of a three-dimensional model.

44. (Previously Presented) The apparatus of claim 20, wherein the processor comprises a three-dimensional (3D) graphics processor having texture blending/mapping hardware and an alpha channel.

45. (Previously Presented) The apparatus of claim 20, wherein the parametric surface comprises control points that dictate a shape of the parametric surface, the trimming texture being applied to the shape of the parametric surface dictated by the control points.

46. (Previously Presented) The apparatus of claim 20, wherein the polygons have texture coordinates that are used in defining a texture of the polygons.